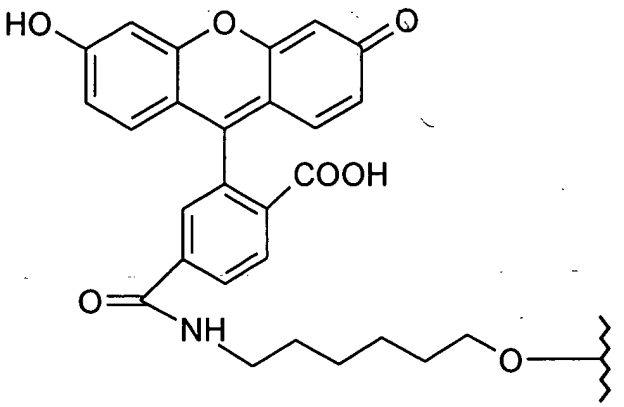
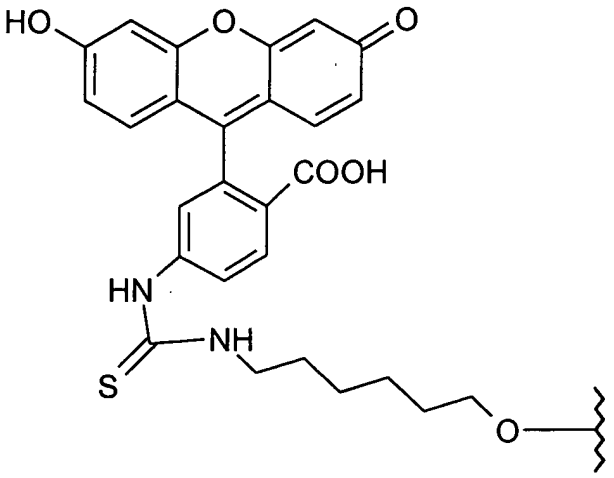
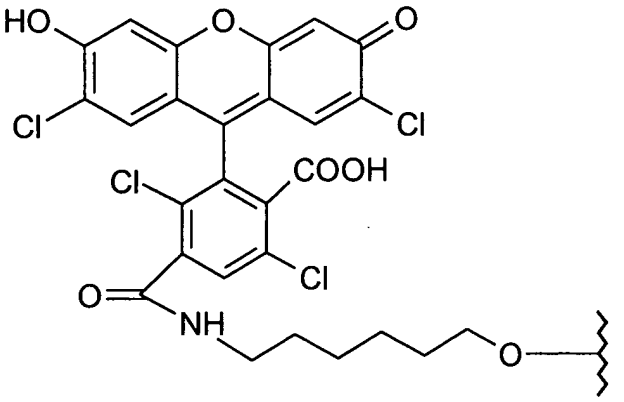
Fig. 1a:



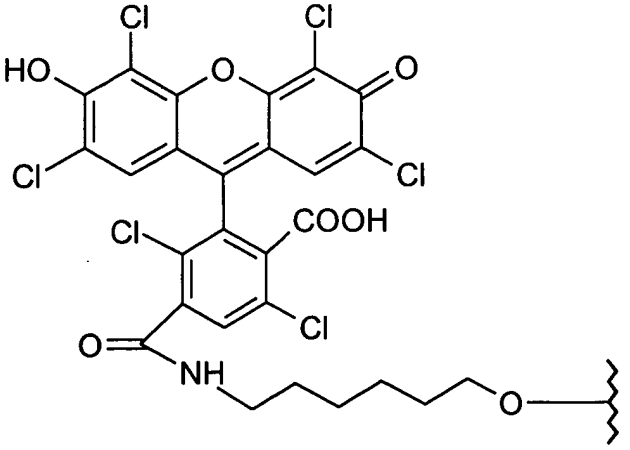
Fluorescein (Amide)



Fluorescein (Thiourea)

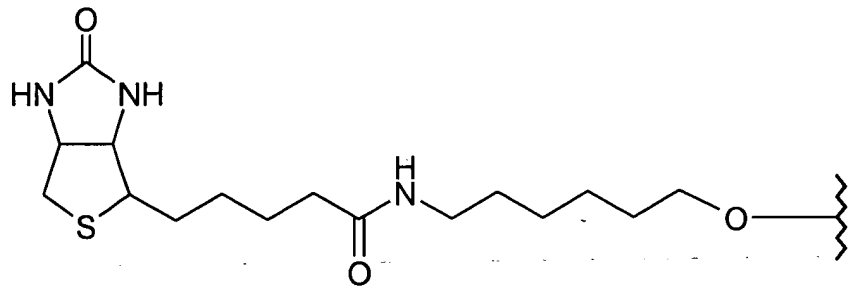


Tetrachlorofluorescein

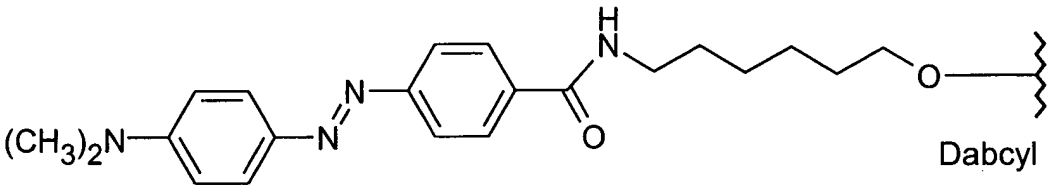


Hexachlorofluorescein

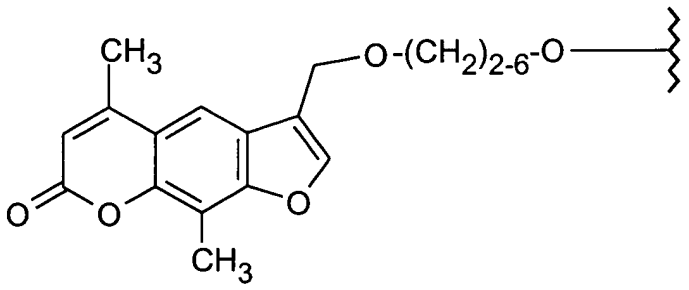
Fig. 1b:



Biotin

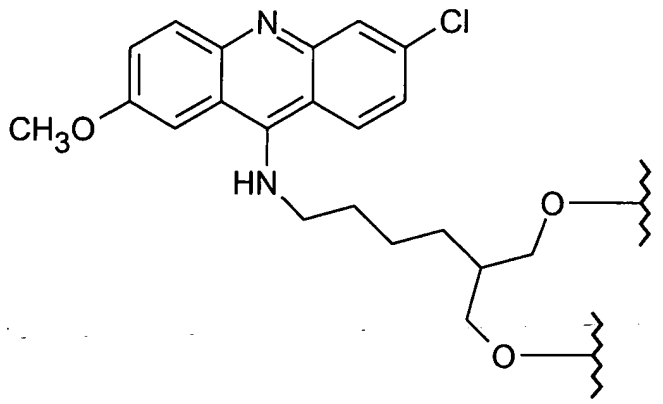


Dabcyl

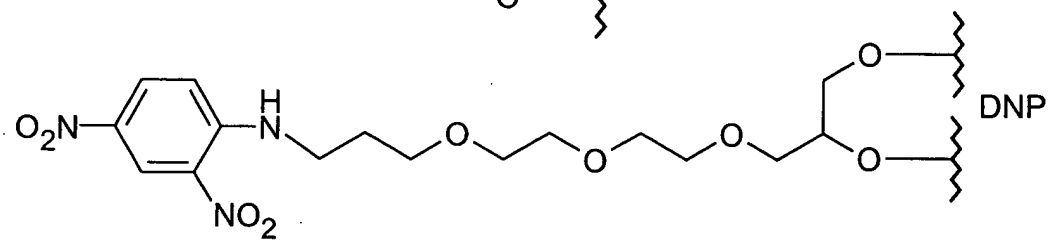


Psoralen

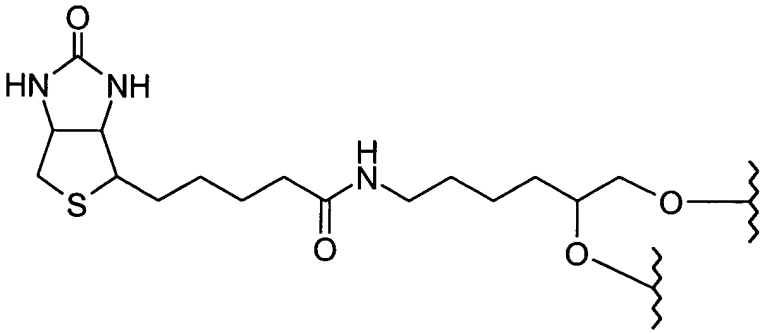
Fig. 2a:



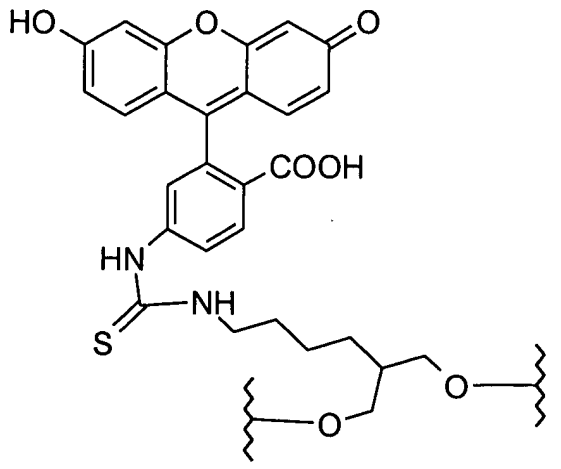
Acridin



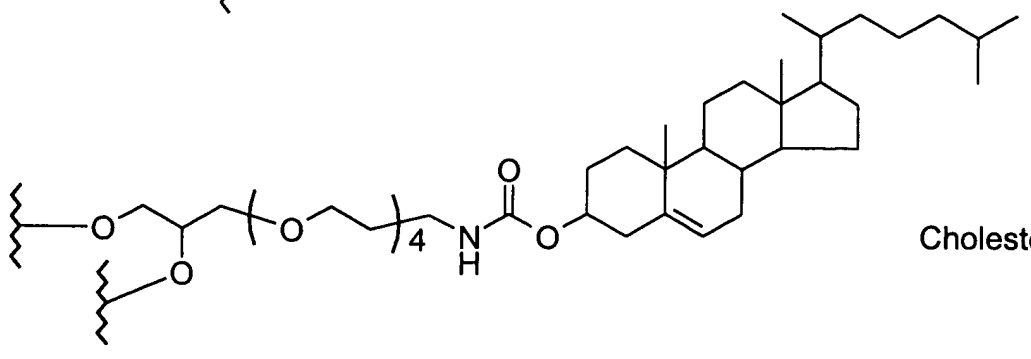
DNP



Biotin

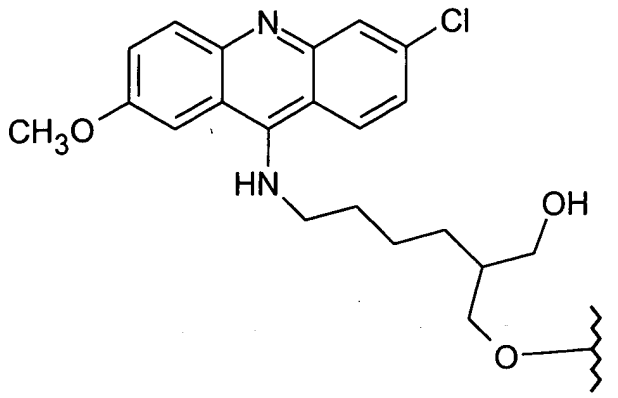


Fluorescein
(Thiourea)

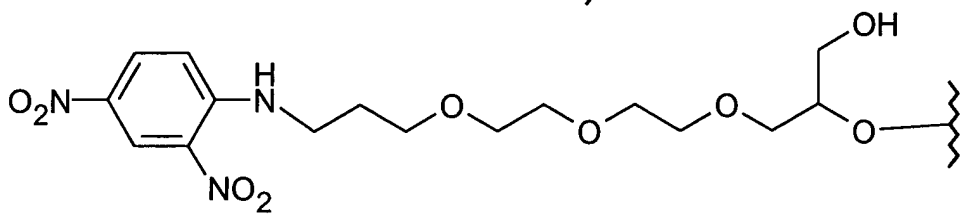


Cholesterol

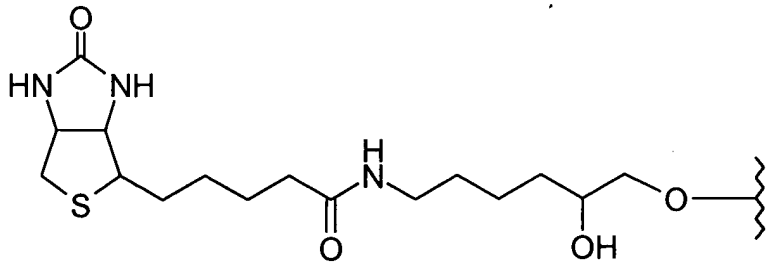
Fig. 2b:



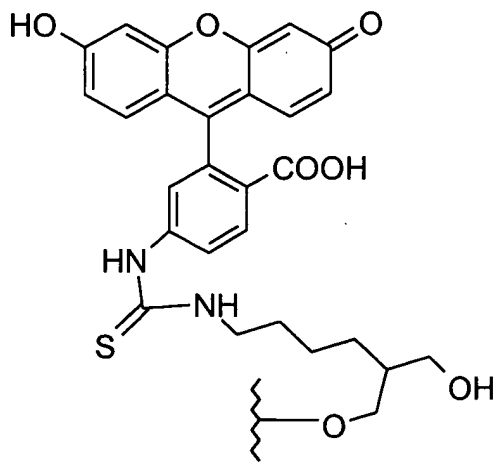
Acridin



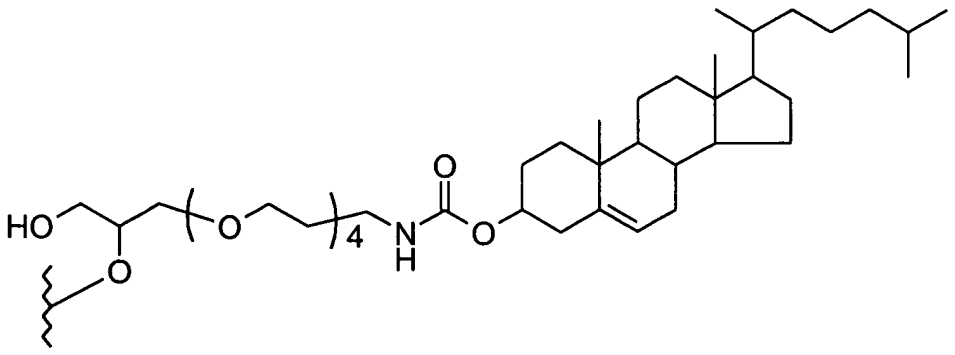
DNP



Biotin

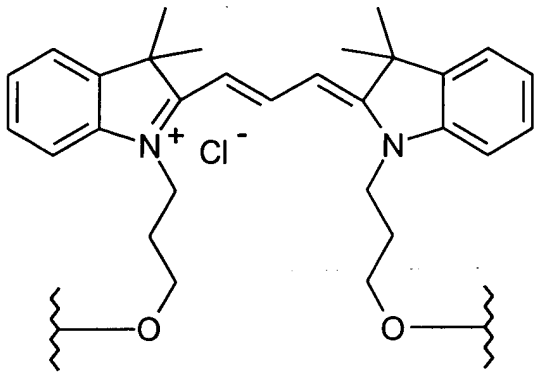


Fluorescein
(Thiourea)

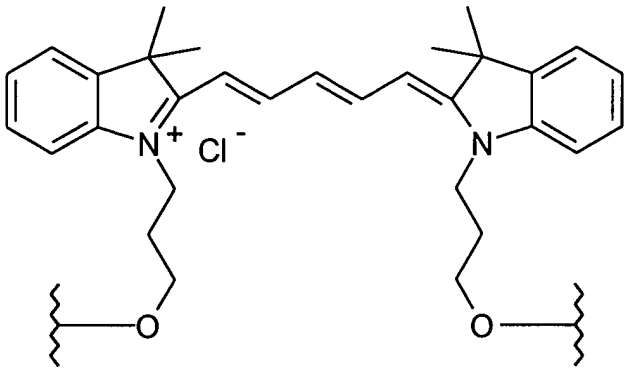


Cholesterol

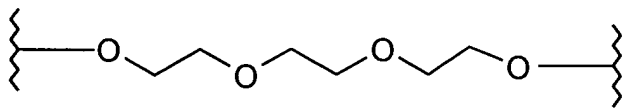
Fig. 3a:



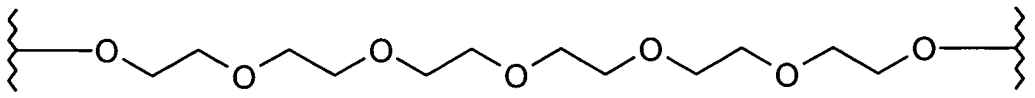
Cy3



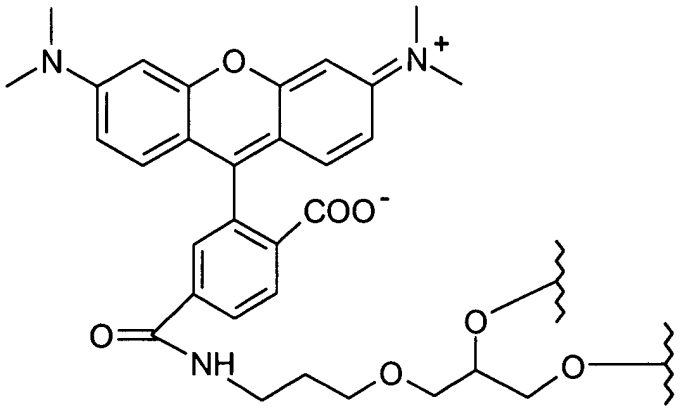
Cy5



Spacer-9

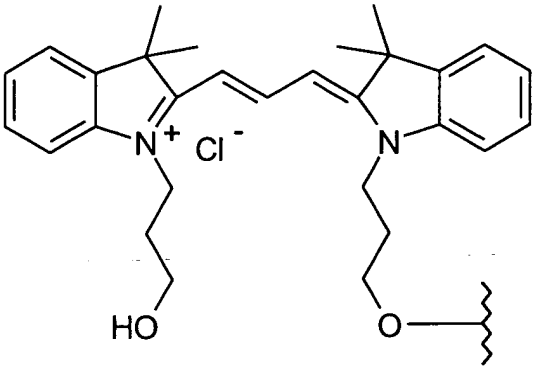


Spacer-18

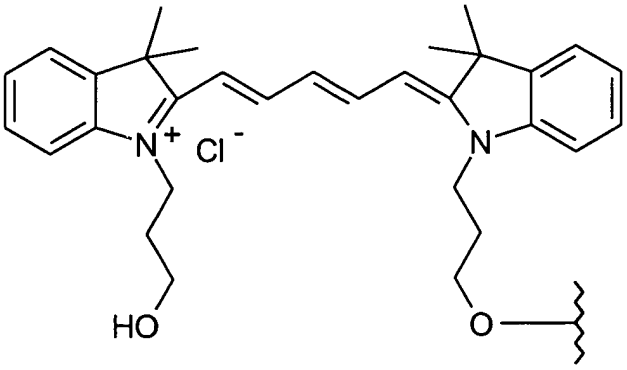


TAMRA

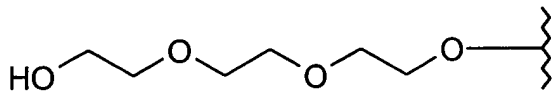
Fig. 3b:



Cy3



Cy5



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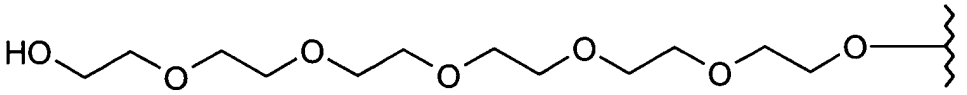

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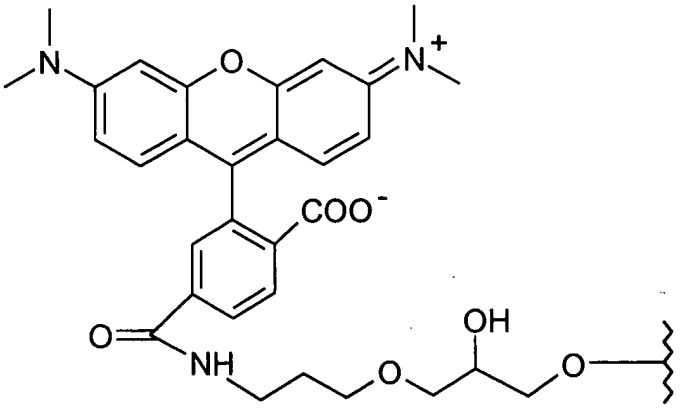
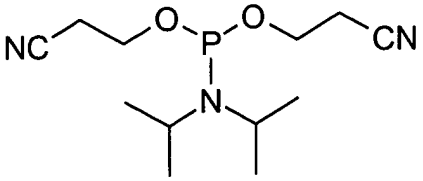
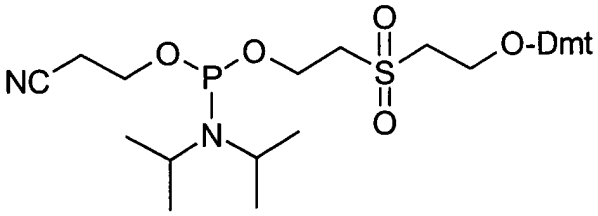


TAMRA

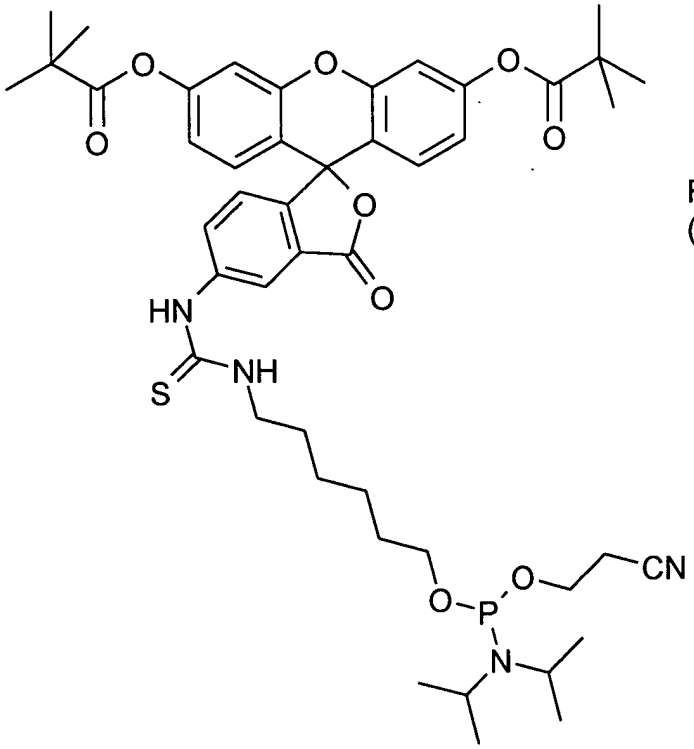
Fig. 4a:



Phosphorylating reagent 1

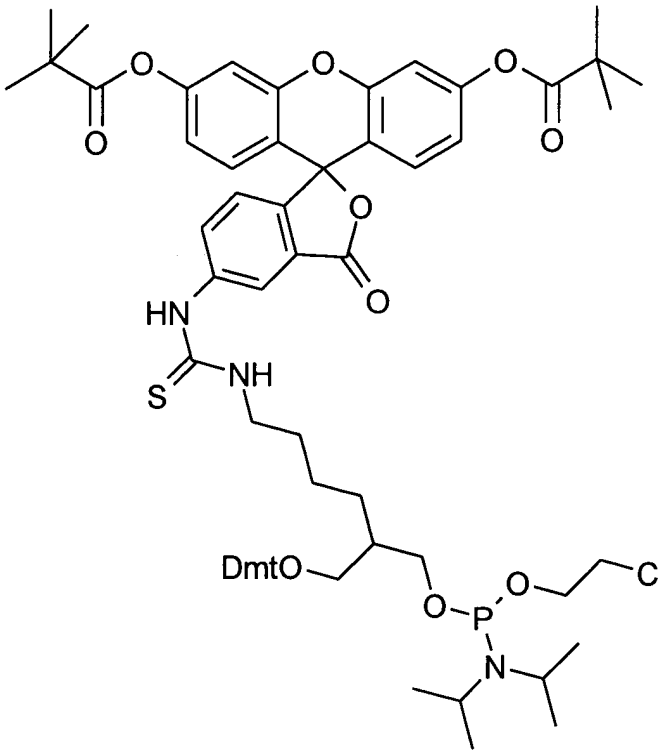


Phosphorylating reagent 2

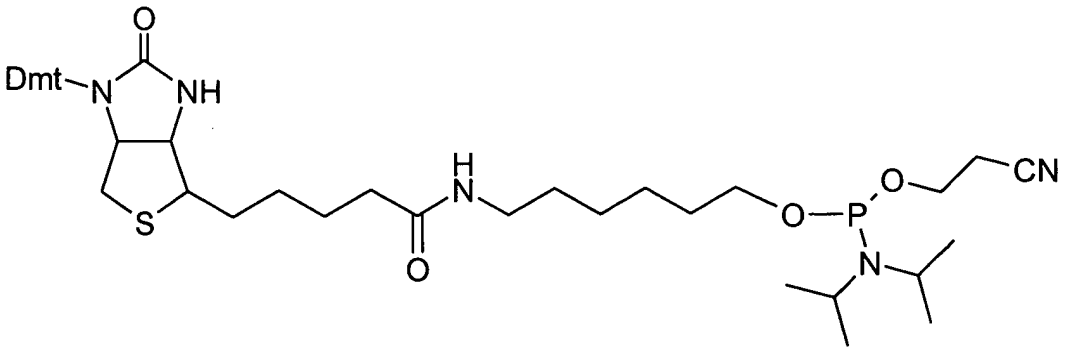


Fluorescein phosphoramidit 3
(monofunctional)

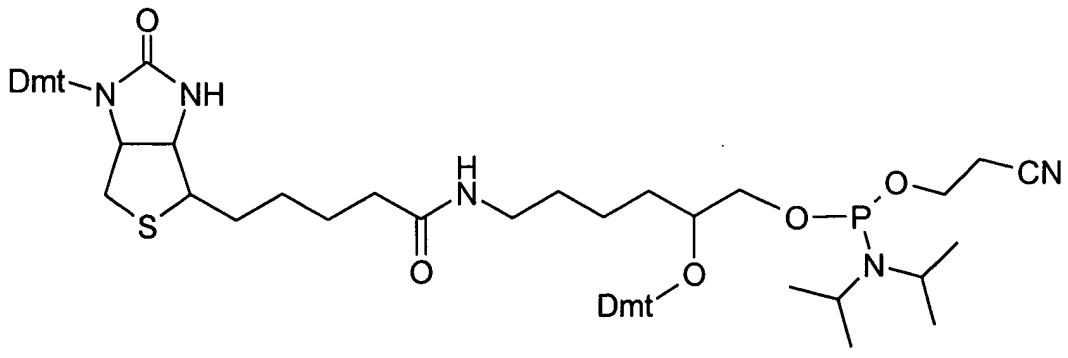
Fig. 4b:



Fluorescein phosphoramidit 4
(bifunctional)

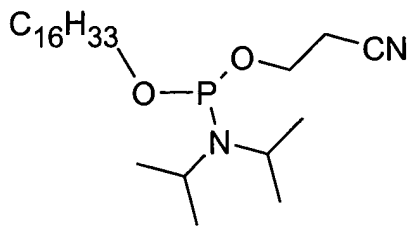


Biotin phosphoramidit 5 (monofunctional)

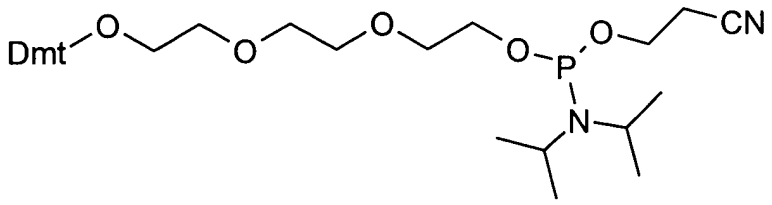


Biotin phosphoramidit 6 (bifunctional)

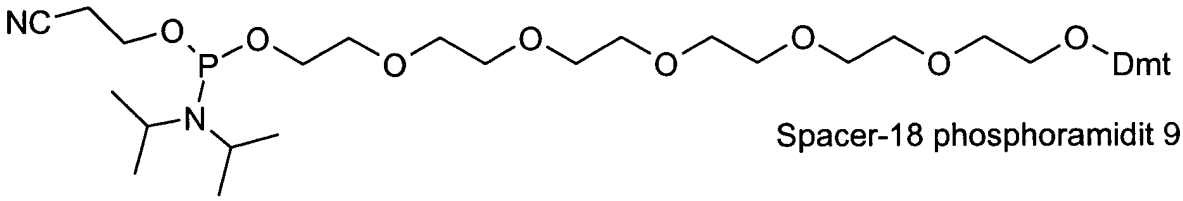
Fig. 4c:



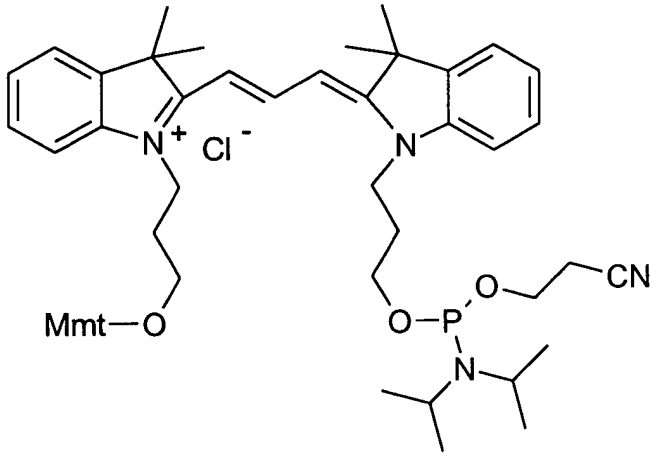
C16-phosphorylating reagent 7



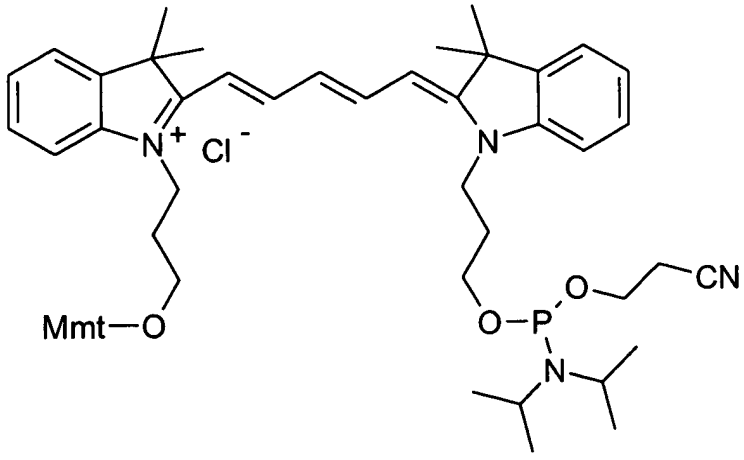
Spacer-9 phosphoramidit 8



Spacer-18 phosphoramidit 9

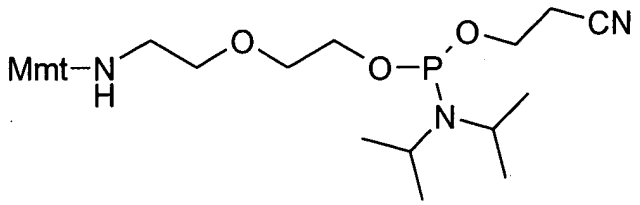


Cyanin-3 phosphoramidit 10

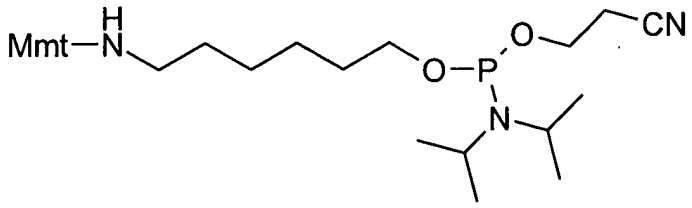


Cyanin-5 phosphoramidit 11

Fig. 4d:



Aminomodifier-5
phosphoramidit 12



Aminomodifier-C6
phosphoramidit 13

Fig. 5a:

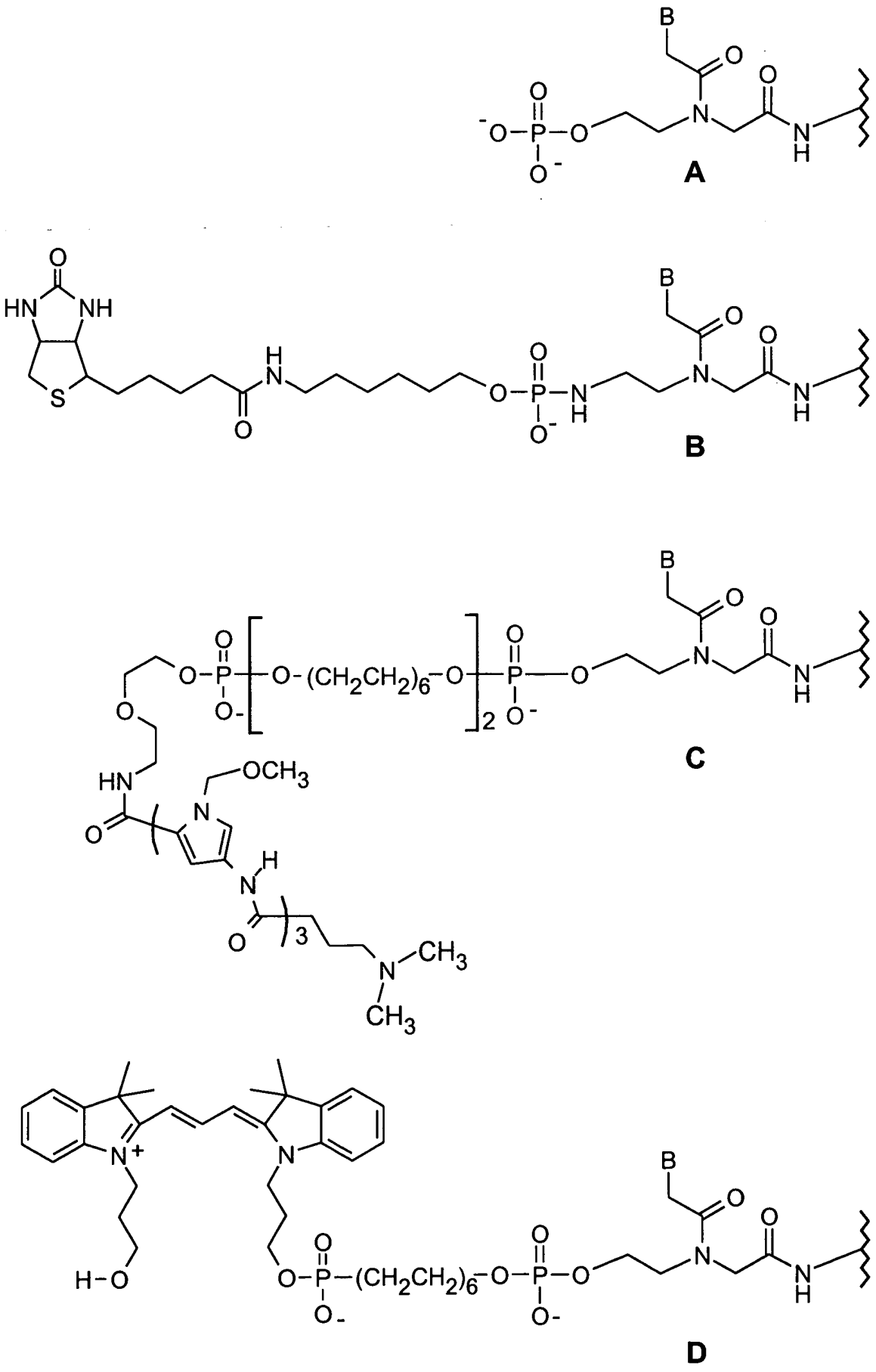
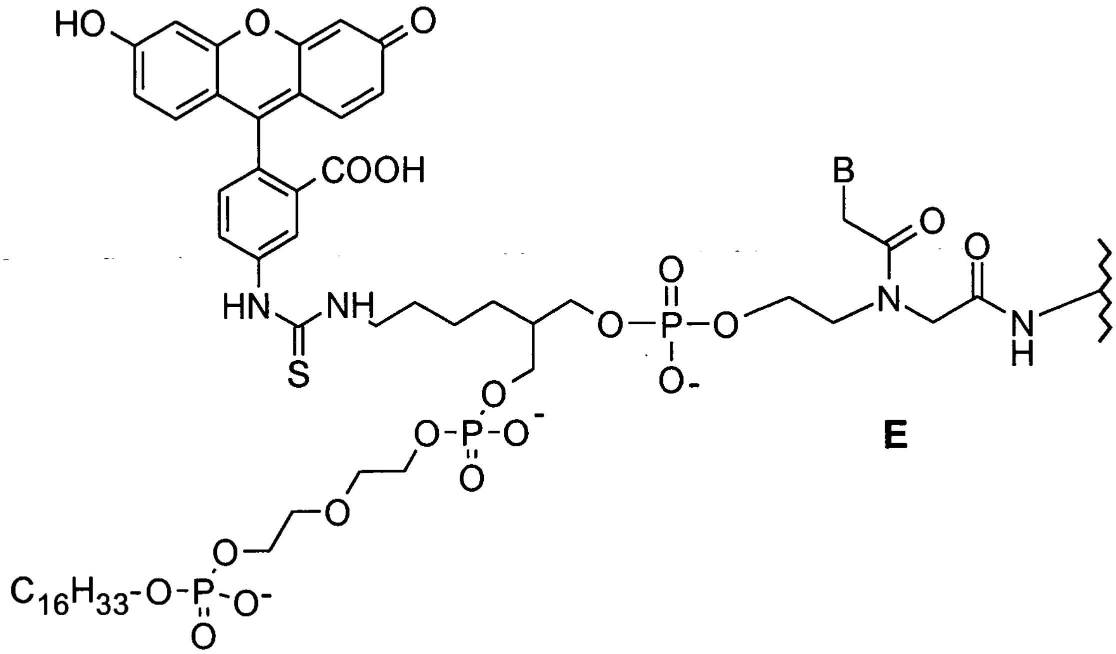
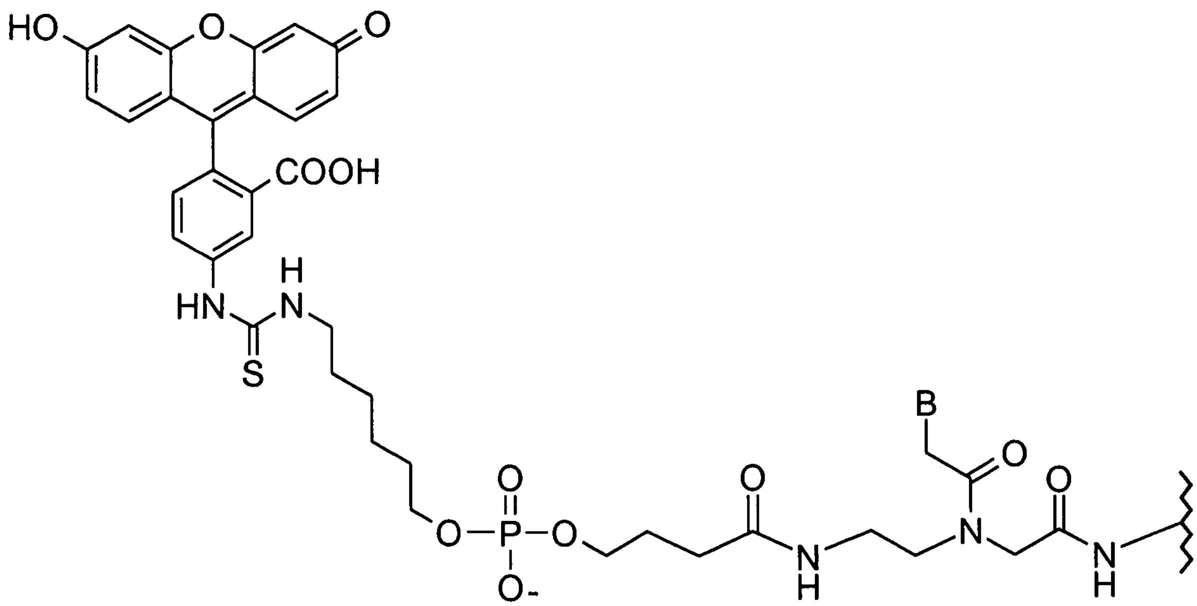


Fig. 5b:

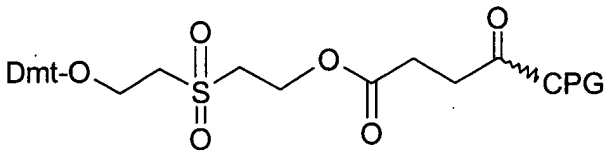


E

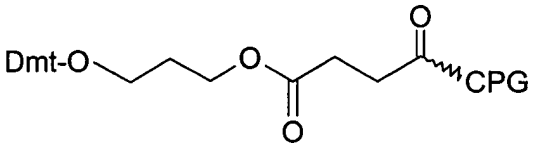


F

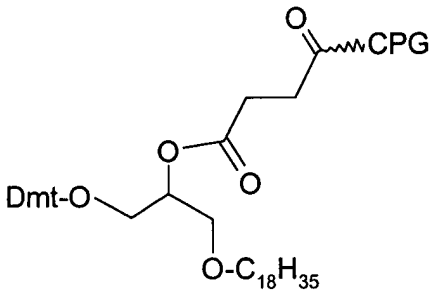
Fig. 6:



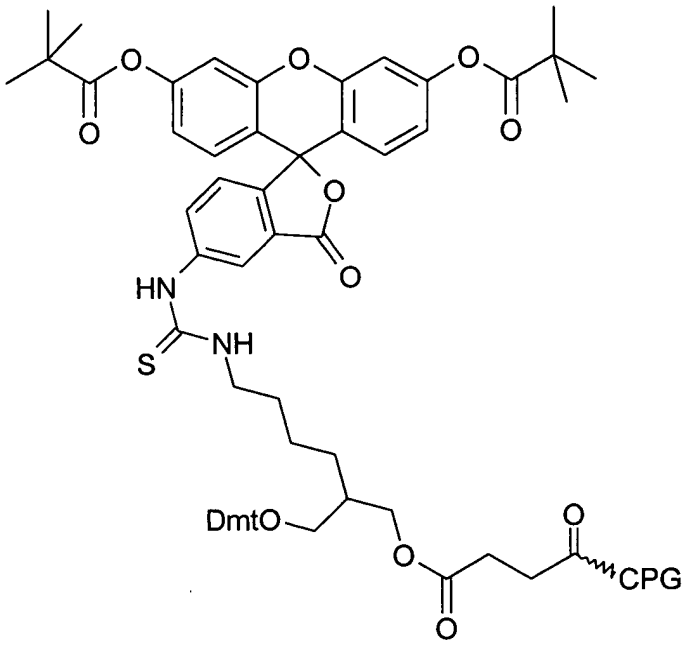
Bishydroxyethylsulfonyl support 1



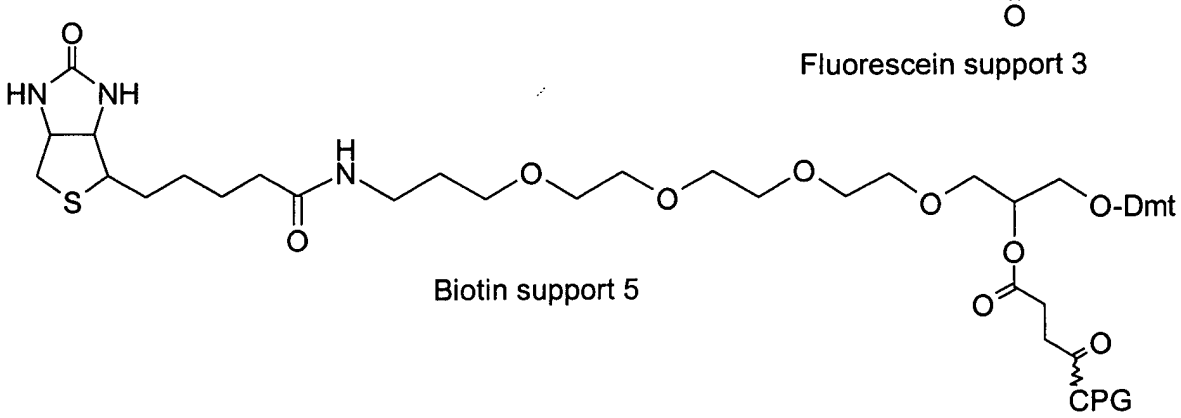
3'-Spacer-C3 support 2



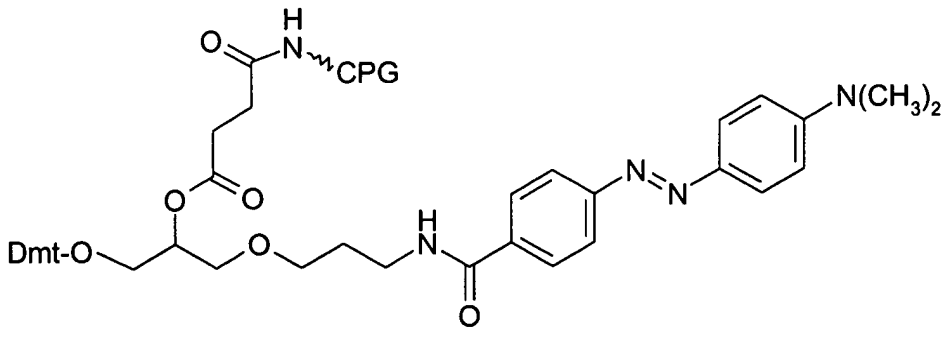
3'-Batyl support 4



Fluorescein support 3



Biotin support 5



DABCYL support 6

Fig. 7:

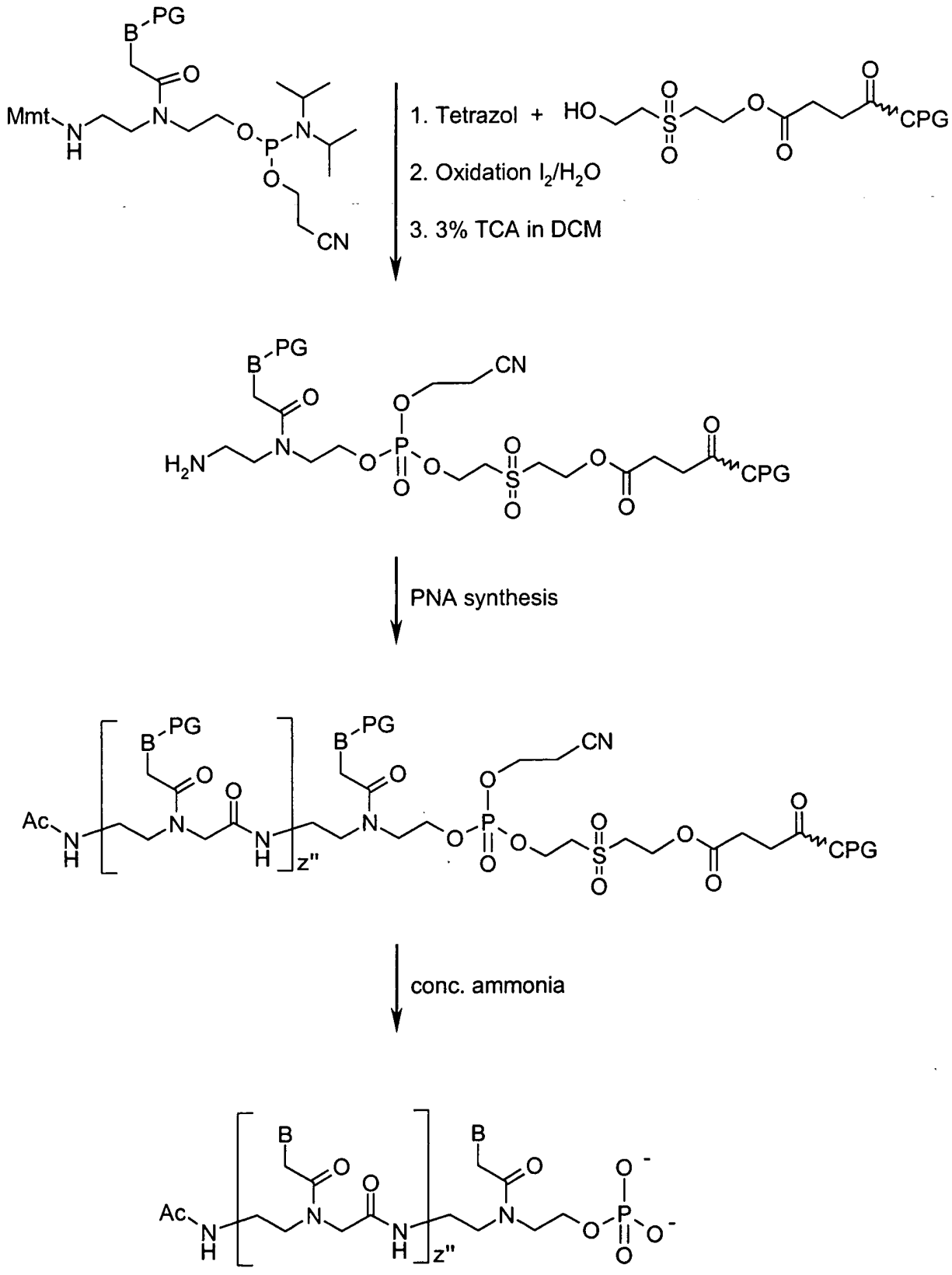

PG
B
Mmt
N
H
O
P
CN
1. Tetrazol +
HO
S
CPG
2. Oxidation I_2/H_2O
3. 3% TCA in DCM
H_2N
PNA synthesis
Ac
z"
conc. ammonia

Fig. 8:

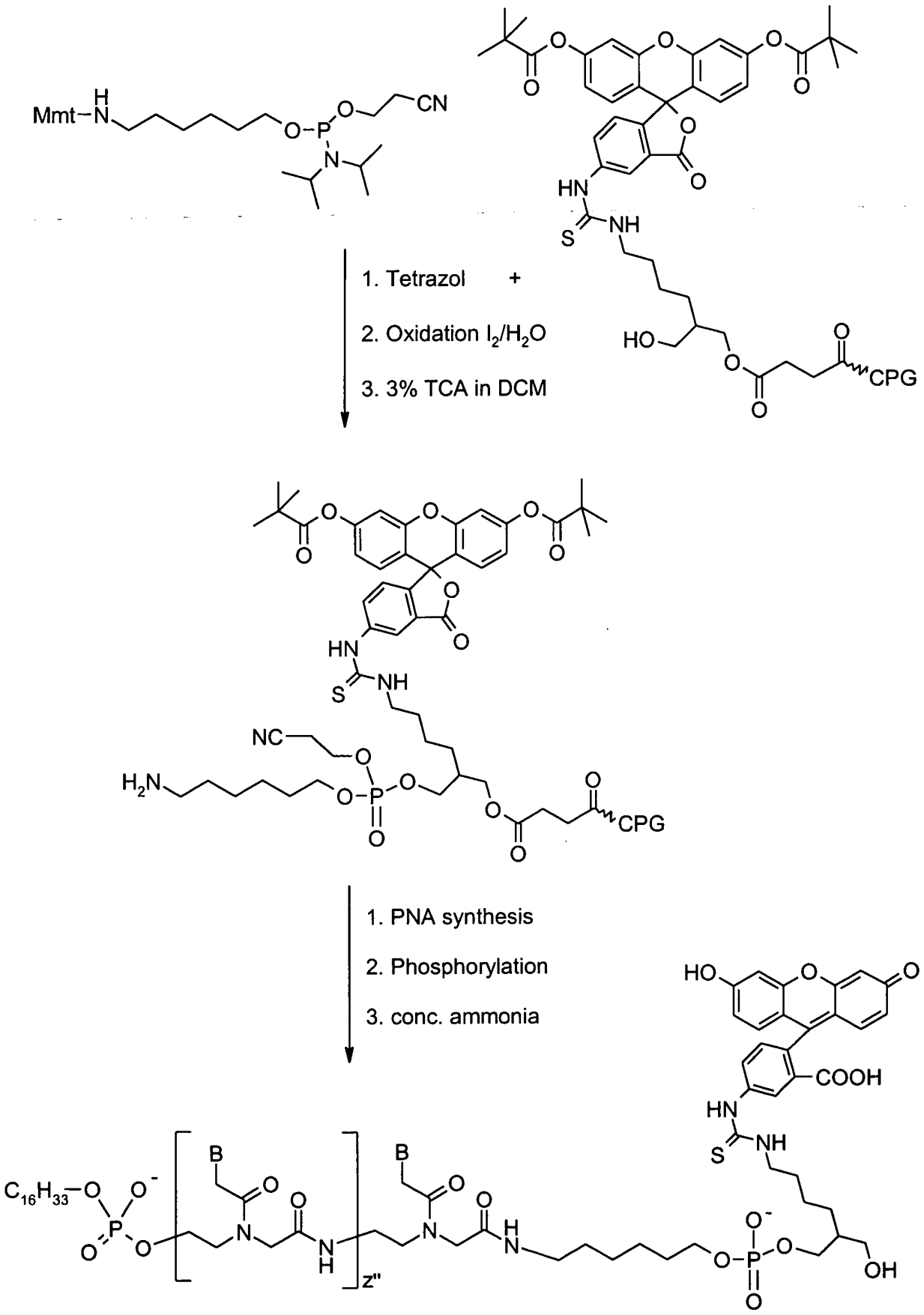
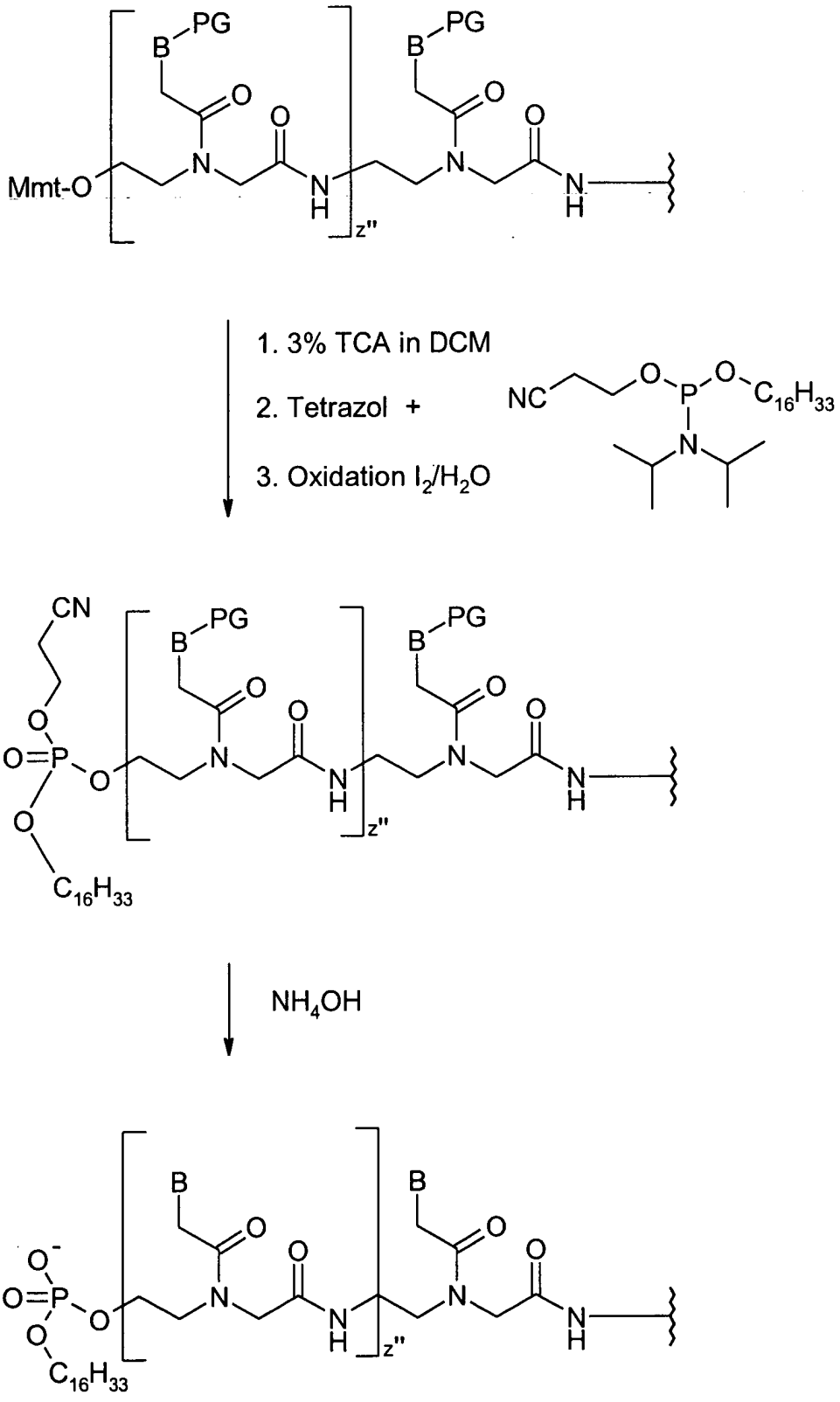

Mmt
H
N
CN
O
P
1. Tetrazol +
2. Oxidation I_2/H_2O
3. 3% TCA in DCM
HN
NH
S
HO
CPG
NC
H_2N
1. PNA synthesis
2. Phosphorylation
3. conc. ammonia
COOH
OH
B
z"
$C_{16}H_{33}$

Fig. 9:


Mmt-O
PG
B
N
H
z"
1. 3% TCA in DCM
2. Tetrazol +
3. Oxidation I_2/H_2O
NC
$C_{16}H_{33}$
CN
NH_4OH